

WORKING P A P E R

Supplemental Material for:

Effects of Student Displacement in Louisiana During the First Academic Year After the Hurricanes of 2005

JOHN F. PANE, DANIEL F. MCCAFFREY,
NIDHI KALRA, AND ANNIE JIE ZHOU

This product is part of the RAND Education working paper series. RAND working papers are intended to share researchers' latest findings and to solicit informal peer review. They have been approved for circulation by RAND Education but have not been formally edited or peer reviewed. Unless otherwise indicated, working papers can be quoted and cited without permission of the author, provided the source is clearly referred to as a working paper. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors. **RAND**® is a registered trademark.

WR-570-RC

September 2008



RAND

GULF STATES POLICY INSTITUTE

PREFACE

The purpose of this document is to publish a complete tabulation of statistical model results reported in the article:

Pane, J. F., D. F. McCaffrey, N. Kalra, and A. J. Zhou, "Effects of Student Displacement in Louisiana During the First Academic Year After the Hurricanes of 2005," *Journal of Education for Students Placed at Risk*, Vol. 13, 2008, pp. 168-211.

This research was conducted within RAND Education and the RAND Gulf States Policy Institute (RGSPI). RAND Education is a division of the RAND Corporation. Its mission is to bring accurate data and careful, objective analysis to the national debate on education policy. RGSPI is a collaboration between the RAND Corporation and seven Gulf states' universities, to assist in long-term recovery efforts by providing evidence-based policy guidance to facilitate and speed regional recovery and growth, reestablish services and invest wisely in infrastructure.

The research is part of RAND's continuing program of self-initiated research, which is made possible, in part, by the generous support of donors and by the independent research and development provisions of RAND's contracts for the operation of its U.S. Department of Defense federally funded research and development centers.

Additional information about RAND is available at www.rand.org.

TABLES

Model 1: Summary of student outcomes

Mathematics.....	1
English-language arts.....	1
Reading.....	1
Science.....	2
Social studies.....	2

Model 2: Overall effects of displacement

Mathematics.....	3
English-language arts.....	4
Reading.....	5
Science.....	6
Social studies.....	7

Model 3: Effects of displacement by student experience group

Mathematics.....	8
English-language arts.....	10
Reading.....	12
Science.....	13
Social studies.....	14

Model 4: The effect of relocating to schools with higher or lower school performance than students' original schools

Mathematics.....	15
English-language arts.....	16
Reading.....	17
Science.....	18
Social studies.....	19

Model 5: Effects of time out of school and high mobility among schools

Mathematics.....	20
English-language arts.....	21
Reading.....	22
Science.....	23
Social studies.....	24

Model 1: Summary of student outcomes – mathematics

Variable	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9
Intercept	5.97 (0.03)	8.35 (0.03)	8.25 (0.03)	8.42 (0.03)	8.54 (0.03)	8.27 (0.03)
Displaced	-0.19 (0.03)	-0.17 (0.02)	-0.19 (0.03)	-0.10 (0.03)	-0.14 (0.03)	-0.16 (0.03)
Number of Parishes	742	728	527	470	495	359
Number of Schools	85	84	81	82	86	77
Number of Observations	40,536	40,767	38,367	41,047	39,840	37,009
Between Parish Standard Deviation	0.20	0.17	0.18	0.19	0.18	0.15
Between School Standard Deviation	0.41	0.35	0.35	0.34	0.42	0.41
Within School Standard Deviation	0.90	0.92	0.92	0.93	0.92	0.93

Model 1: Summary of student outcomes – English-language arts

Variable	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9
Intercept	5.73 (0.03)	7.76 (0.03)	7.07 (0.03)	6.91 (0.02)	7.62 (0.03)	6.69 (0.02)
Displaced	-0.14 (0.03)	-0.22 (0.02)	-0.18 (0.03)	-0.11 (0.03)	-0.10 (0.03)	-0.13 (0.03)
Number of Parishes	742	728	526	470	490	362
Number of Schools	85	84	80	82	86	77
Number of Observations	40,541	40,768	38,330	41,033	39,846	38,087
Between Parish Standard Deviation	0.16	0.17	0.17	0.13	0.13	0.09
Between School Standard Deviation	0.38	0.35	0.33	0.34	0.48	0.36
Within School Standard Deviation	0.91	0.93	0.92	0.94	0.92	0.95

Model 1: Summary of student outcomes – reading

Variable	Grade 5	Grade 6	Grade 7	Grade 9
Intercept	9.09 (0.03)	8.34 (0.03)	8.08 (0.03)	7.88 (0.03)
Displaced	-0.20 (0.02)	-0.14 (0.03)	-0.09 (0.03)	-0.14 (0.03)
Number of Parishes	728	526	470	362
Number of Schools	84	80	82	77
Number of Observations	40,769	38,333	41,039	38,099
Between Parish Standard Deviation	0.22	0.21	0.20	0.16
Between School Standard Deviation	0.36	0.35	0.36	0.40
Within School Standard Deviation	0.91	0.91	0.92	0.92

Model 1: Summary of student outcomes – science

Variable	Grade 4	Grade 8
Intercept	6.45 (0.03)	7.11 (0.04)
Displaced	-0.19 (0.03)	-0.15 (0.03)
Number of Parishes	741	483
Number of Schools	85	85
Number of Observations	40,507	39,775
Between Parish Standard Deviation	0.23	0.21
Between School Standard Deviation	0.41	0.44
Within School Standard Deviation	0.88	0.91

Model 1: Summary of student outcomes – social studies

Variable	Grade 4	Grade 8
Intercept	7.40 (0.04)	6.61 (0.03)
Displaced	-0.17 (0.03)	-0.12 (0.03)
Number of Parishes	741	483
Number of Schools	85	85
Number of Observations	40,501	39,753
Between Parish Standard Deviation	0.23	0.16
Between School Standard Deviation	0.44	0.44
Within School Standard Deviation	0.88	0.92

Model 2: Overall effects of displacement – mathematics

Variable	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9
Intercept	6.04 (0.02)	8.37 (0.01)	8.28 (0.01)	8.43 (0.01)	8.56 (0.01)	8.45 (0.01)
Prior Reading (Linear)	23.14 (1.02)	NA	9.37 (0.99)	22.44 (1)	19.14 (0.97)	NA
Prior Reading (Quadratic)	4.94 (0.73)	NA	1.35 (0.71)	0.61 (0.70)	-2.56 (0.68)	NA
Prior Reading (Cubic)	-1.93 (0.65)	NA	0.05 (0.63)	-0.19 (0.63)	0.57 (0.62)	NA
Prior Language (Linear)	40.41 (1.02)	17.45 (1.09)	25.74 (0.96)	18.65 (1.01)	27.52 (0.99)	9.02 (1.11)
Prior Language (Quadratic)	2.05 (0.74)	7.52 (0.82)	1.96 (0.73)	0.24 (0.72)	0.79 (0.69)	0.69 (0.78)
Prior Language (Cubic)	2.18 (0.65)	-0.33 (0.71)	2.15 (0.65)	4.51 (0.65)	8.20 (0.61)	-1.61 (0.66)
Prior Mathematics (Linear)	94.50 (1.01)	91.53 (1.02)	120.14 (0.98)	124.51 (1)	115.59 (0.97)	102.60 (1)
Prior Mathematics (Quadratic)	-1.30 (0.73)	6.19 (0.80)	-0.84 (0.73)	-1.07 (0.72)	2.40 (0.69)	19.05 (0.75)
Prior Mathematics (Cubic)	-1.41 (0.65)	-15.71 (0.72)	-5.90 (0.65)	-4.88 (0.65)	10.53 (0.61)	-12.91 (0.65)
Prior Science (Linear)	NA	15.56 (1.15)	NA	NA	NA	14.68 (1.17)
Prior Science (Quadratic)	NA	1.87 (0.80)	NA	NA	NA	0.53 (0.78)
Prior Science (Cubic)	NA	-1.86 (0.71)	NA	NA	NA	-2.61 (0.67)
Prior Social Studies (Linear)	NA	28.11 (1.20)	NA	NA	NA	23.31 (1.17)
Prior Social Studies (Quadratic)	NA	8.81 (0.81)	NA	NA	NA	7.55 (0.78)
Prior Social Studies (Cubic)	NA	-3.79 (0.72)	NA	NA	NA	-1.74 (0.67)
American Indian	-0.05 (0.04)	-0.08 (0.04)	-0.04 (0.04)	-0.05 (0.04)	-0.01 (0.04)	-0.07 (0.04)
Asian	0.28 (0.03)	0.10 (0.03)	0.22 (0.03)	0.14 (0.03)	0.19 (0.03)	0.11 (0.03)
African American	-0.14 (0.01)	-0.14 (0.01)	-0.09 (0.01)	-0.09 (0.01)	-0.12 (0.01)	-0.15 (0.01)
Hispanic	0.05 (0.02)	-0.01 (0.03)	0.06 (0.02)	0.01 (0.02)	0.01 (0.02)	-0.03 (0.03)
Male	0.06 (0.01)	0.14 (0.01)	0.09 (0.01)	0.11 (0.01)	0.14 (0.01)	-0.03 (0.01)
Entry School Performance	0.06 (0.01)	0.05 (0.01)	0.05 (0.01)	0.05 (0.01)	0.06 (0.01)	0.04 (0.01)
Displaced	-0.06 (0.02)	-0.04 (0.02)	-0.03 (0.02)	0.02 (0.01)	-0.02 (0.02)	-0.01 (0.02)
Number of Parishes	723	706	509	456	462	334
Number of Schools	84	81	80	79	83	77
Number of Observations	40,164	40,101	37,501	40,283	39,124	36,714
Between Parish Standard Deviation	0.09	0.06	0.09	0.05	0.06	0.06
Between School Standard Deviation	0.21	0.15	0.13	0.07	0.14	0.11
Within School Standard Deviation	0.60	0.64	0.59	0.58	0.57	0.60

Model 2: Overall effects of displacement – English-language arts

Variable	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9
Intercept	5.84 (0.01)	7.92 (0.01)	7.19 (0.01)	7.02 (0.01)	7.72 (0.02)	6.92 (0.01)
Prior Reading (Linear)	80.81 (1.02)	NA	27.06 (0.90)	22.26 (0.88)	74.40 (1.01)	NA
Prior Reading (Quadratic)	-4.92 (0.73)	NA	-0.05 (0.65)	-0.78 (0.63)	-6.40 (0.71)	NA
Prior Reading (Cubic)	-6.65 (0.65)	NA	-1.07 (0.58)	-2.70 (0.56)	-5.89 (0.64)	NA
Prior Language (Linear)	52.64 (1.01)	75.48 (1.12)	117.99 (0.88)	134.74 (0.90)	60.23 (1.03)	63.24 (1.13)
Prior Language (Quadratic)	-9.34 (0.74)	3.37 (0.84)	6.53 (0.66)	2.16 (0.64)	-5.02 (0.72)	14.37 (0.79)
Prior Language (Cubic)	6.80 (0.65)	-9.41 (0.74)	-2.71 (0.59)	-4.09 (0.57)	17.63 (0.63)	-2.95 (0.67)
Prior Mathematics (Linear)	31.75 (1.01)	39.27 (1.05)	23.23 (0.90)	20.69 (0.89)	31.44 (1)	45.44 (1.03)
Prior Mathematics (Quadratic)	-5.93 (0.73)	3.59 (0.82)	2.17 (0.67)	0.15 (0.64)	-5.96 (0.71)	10.27 (0.76)
Prior Mathematics (Cubic)	2.89 (0.65)	-4.40 (0.74)	0.43 (0.59)	0.10 (0.58)	10.12 (0.63)	-5.49 (0.66)
Prior Science (Linear)	NA	10.87 (1.19)	NA	NA	NA	9.33 (1.21)
Prior Science (Quadratic)	NA	0.96 (0.82)	NA	NA	NA	1.98 (0.79)
Prior Science (Cubic)	NA	-2.11 (0.74)	NA	NA	NA	-1.77 (0.68)
Prior Social Studies (Linear)	NA	26.33 (1.24)	NA	NA	NA	41.05 (1.20)
Prior Social Studies (Quadratic)	NA	5.17 (0.84)	NA	NA	NA	15.85 (0.80)
Prior Social Studies (Cubic)	NA	-5.14 (0.74)	NA	NA	NA	-2.42 (0.69)
American Indian	-0.01 (0.04)	-0.02 (0.04)	0 (0.03)	-0.08 (0.03)	-0.08 (0.04)	-0.05 (0.04)
Asian	0.17 (0.03)	0.19 (0.03)	0.24 (0.03)	0.15 (0.02)	0.11 (0.03)	0.07 (0.03)
African American	-0.03 (0.01)	0.02 (0.01)	0.03 (0.01)	0.03 (0.01)	0.02 (0.01)	0.07 (0.01)
Hispanic	0.10 (0.02)	0.03 (0.03)	0.06 (0.02)	0.06 (0.02)	0.07 (0.02)	-0.02 (0.03)
Male	-0.14 (0.01)	-0.26 (0.01)	-0.16 (0.01)	-0.18 (0.01)	-0.15 (0.01)	-0.36 (0.01)
Entry School Performance	0.04 (0.01)	0.08 (0.01)	0.03 (0.01)	0.04 (0.01)	0.07 (0.01)	0.03 (0.01)
Displaced	0 (0.02)	-0.09 (0.02)	-0.03 (0.01)	0.01 (0.01)	0.03 (0.02)	-0.01 (0.02)
Number of Parishes	723	706	509	456	458	336
Number of Schools	84	81	80	79	83	77
Number of Observations	40,169	40,101	37,466	40,269	39,131	37,770
Between Parish Standard Deviation	0.07	0.07	0.05	0.05	0.09	0.07
Between School Standard Deviation	0.17	0.18	0.14	0.10	0.15	0.09
Within School Standard Deviation	0.60	0.66	0.54	0.51	0.59	0.61

Model 2: Overall effects of displacement – reading

Variable	Grade 5	Grade 6	Grade 7	Grade 9
Intercept	9.17 (0.01)	8.47 (0.01)	8.15 (0.01)	8.06 (0.01)
Prior Reading (Linear)	NA	122.01 (0.91)	133.35 (0.91)	NA
Prior Reading (Quadratic)	NA	9.85 (0.65)	5.78 (0.65)	NA
Prior Reading (Cubic)	NA	-11.18 (0.58)	-10.48 (0.58)	NA
Prior Language (Linear)	58.57 (1.08)	12.07 (0.89)	18.68 (0.92)	53.99 (0.98)
Prior Language (Quadratic)	-0.28 (0.81)	4.10 (0.67)	-3.71 (0.66)	6.95 (0.68)
Prior Language (Cubic)	-7.56 (0.71)	3.36 (0.60)	2.42 (0.59)	-5.77 (0.58)
Prior Mathematics (Linear)	1.19 (1.01)	27.55 (0.91)	22.91 (0.92)	7.44 (0.89)
Prior Mathematics (Quadratic)	0.39 (0.79)	-2.39 (0.67)	-0.85 (0.66)	3.37 (0.66)
Prior Mathematics (Cubic)	0.43 (0.71)	1 (0.60)	-0.68 (0.59)	0.12 (0.57)
Prior Science (Linear)	34.04 (1.14)	NA	NA	35.57 (1.05)
Prior Science (Quadratic)	-0.49 (0.79)	NA	NA	6.28 (0.69)
Prior Science (Cubic)	-6.35 (0.71)	NA	NA	-4.73 (0.59)
Prior Social Studies (Linear)	58.25 (1.19)	NA	NA	69.53 (1.04)
Prior Social Studies (Quadratic)	11.72 (0.80)	NA	NA	24.31 (0.69)
Prior Social Studies (Cubic)	-12.82 (0.71)	NA	NA	-3.23 (0.60)
American Indian	-0.06 (0.04)	-0.09 (0.03)	-0.01 (0.03)	-0.08 (0.03)
Asian	-0.03 (0.03)	0.01 (0.03)	0.01 (0.03)	0 (0.02)
African American	-0.19 (0.01)	-0.14 (0.01)	-0.05 (0.01)	-0.07 (0.01)
Hispanic	-0.04 (0.03)	-0.07 (0.02)	0.03 (0.02)	0.01 (0.02)
Male	0.07 (0.01)	-0.03 (0.01)	-0.03 (0.01)	-0.10 (0.01)
Entry School Performance	0.05 (0.01)	0.03 (0.01)	0.03 (0.01)	0.05 (0.01)
Displaced	-0.04 (0.02)	-0.02 (0.01)	0.01 (0.01)	0.02 (0.02)
Number of Parishes	706	509	456	336
Number of Schools	81	80	79	77
Number of Observations	40102	37468	40275	37781
Between Parish Standard Deviation	0.07	0.03	0.04	0.08
Between School Standard Deviation	0.14	0.10	0.10	0.09
Within School Standard Deviation	0.63	0.54	0.53	0.53

Model 2: Overall effects of displacement – science

Variable	Grade 4	Grade 8
Intercept	6.52 (0.01)	7.17 (0.01)
Prior Reading (Linear)	82.60 (1.05)	98.45 (1)
Prior Reading (Quadratic)	-0.28 (0.75)	5.72 (0.70)
Prior Reading (Cubic)	-6.41 (0.67)	-1.93 (0.64)
Prior Language (Linear)	14.62 (1.05)	17.10 (1.02)
Prior Language (Quadratic)	-1.52 (0.76)	-4.80 (0.71)
Prior Language (Cubic)	1.97 (0.67)	7.39 (0.63)
Prior Mathematics (Linear)	48.80 (1.04)	42.43 (0.99)
Prior Mathematics (Quadratic)	-8.54 (0.76)	-3.10 (0.70)
Prior Mathematics (Cubic)	1.55 (0.67)	6.60 (0.62)
American Indian	-0.04 (0.04)	-0.02 (0.04)
Asian	0.11 (0.03)	0 (0.03)
African American	-0.24 (0.01)	-0.16 (0.01)
Hispanic	-0.01 (0.02)	-0.01 (0.02)
Male	0.15 (0.01)	0.12 (0.01)
Entry School Performance	0.08 (0.01)	0.06 (0.01)
Displaced	-0.07 (0.02)	-0.03 (0.02)
Number of Parishes	723	457
Number of Schools	84	83
Number of Observations	40,137	39,067
Between Parish Standard Deviation	0.07	0.07
Between School Standard Deviation	0.15	0.12
Within School Standard Deviation	0.62	0.58

Model 2: Overall effects of displacement – social studies

Variable	Grade 4	Grade 8
Intercept	7.46 (0.01)	6.61 (0.01)
Prior Reading (Linear)	76.62 (1.03)	102.64 (0.97)
Prior Reading (Quadratic)	-0.84 (0.73)	4.12 (0.68)
Prior Reading (Cubic)	-4.80 (0.66)	-4.88 (0.62)
Prior Language (Linear)	25.60 (1.03)	25.12 (0.99)
Prior Language (Quadratic)	-3.65 (0.75)	-6.66 (0.69)
Prior Language (Cubic)	2.85 (0.66)	8.32 (0.61)
Prior Mathematics (Linear)	49.17 (1.02)	39.60 (0.96)
Prior Mathematics (Quadratic)	-10.71 (0.74)	-4.61 (0.69)
Prior Mathematics (Cubic)	2.01 (0.66)	5.11 (0.61)
American Indian	0.01 (0.04)	0.03 (0.04)
Asian	0.08 (0.03)	0.14 (0.03)
African American	-0.16 (0.01)	-0.06 (0.01)
Hispanic	0.04 (0.02)	0.12 (0.02)
Male	0.08 (0.01)	0.11 (0.01)
Entry School Performance	0.10 (0.01)	0.06 (0.01)
Displaced	-0.03 (0.02)	0.02 (0.02)
Number of Parishes	723	457
Number of Schools	84	83
Number of Observations	40,130	39,045
Between Parish Standard Deviation	0.07	0.07
Between School Standard Deviation	0.18	0.15
Within School Standard Deviation	0.61	0.57

Model 3: Effects of displacement by student experience group – mathematics

Variable	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9
Intercept	6.04 (0.02)	8.37 (0.01)	8.28 (0.02)	8.43 (0.01)	8.56 (0.01)	8.45 (0.01)
Prior Reading (Linear)	23.13 (1.02)	NA	9.38 (0.99)	22.45 (1)	19.15 (0.97)	NA
Prior Reading (Quadratic)	4.95 (0.73)	NA	1.37 (0.71)	0.61 (0.70)	-2.55 (0.68)	NA
Prior Reading (Cubic)	-1.92 (0.65)	NA	0.05 (0.63)	-0.19 (0.63)	0.57 (0.62)	NA
Prior Language (Linear)	40.39 (1.02)	17.45 (1.09)	25.72 (0.96)	18.63 (1.01)	27.50 (0.99)	9.02 (1.11)
Prior Language (Quadratic)	2.06 (0.74)	7.52 (0.82)	1.97 (0.73)	0.25 (0.72)	0.81 (0.69)	0.70 (0.78)
Prior Language (Cubic)	2.19 (0.65)	-0.32 (0.71)	2.15 (0.65)	4.51 (0.65)	8.20 (0.61)	-1.61 (0.66)
Prior Mathematics (Linear)	94.50 (1.01)	91.55 (1.02)	120.14 (0.98)	124.52 (1)	115.57 (0.97)	102.59 (1)
Prior Mathematics (Quadratic)	-1.28 (0.73)	6.19 (0.80)	-0.84 (0.73)	-1.07 (0.72)	2.42 (0.69)	19.05 (0.75)
Prior Mathematics (Cubic)	-1.42 (0.65)	-15.71 (0.72)	-5.91 (0.65)	-4.87 (0.65)	10.51 (0.61)	-12.91 (0.65)
Prior Science (Linear)	NA	15.54 (1.15)	NA	NA	NA	14.68 (1.17)
Prior Science (Quadratic)	NA	1.88 (0.80)	NA	NA	NA	0.52 (0.78)
Prior Science (Cubic)	NA	-1.87 (0.71)	NA	NA	NA	-2.60 (0.67)
Prior Social Studies (Linear)	NA	28.08 (1.20)	NA	NA	NA	23.32 (1.17)
Prior Social Studies (Quadratic)	NA	8.81 (0.81)	NA	NA	NA	7.55 (0.78)
Prior Social Studies (Cubic)	NA	-3.79 (0.72)	NA	NA	NA	-1.75 (0.67)
American Indian	-0.05 (0.04)	-0.08 (0.04)	-0.04 (0.04)	-0.05 (0.04)	-0.01 (0.04)	-0.07 (0.04)
Asian	0.28 (0.03)	0.10 (0.03)	0.22 (0.03)	0.14 (0.03)	0.19 (0.03)	0.11 (0.03)
African American	-0.14 (0.01)	-0.14 (0.01)	-0.09 (0.01)	-0.09 (0.01)	-0.12 (0.01)	-0.15 (0.01)
Hispanic	0.05 (0.02)	-0.01 (0.03)	0.06 (0.02)	0.01 (0.02)	0.01 (0.02)	-0.03 (0.03)
Male	0.06 (0.01)	0.14 (0.01)	0.09 (0.01)	0.11 (0.01)	0.14 (0.01)	-0.03 (0.01)
Entry School Performance	0.06 (0.01)	0.05 (0.01)	0.05 (0.01)	0.05 (0.01)	0.05 (0.01)	0.04 (0.01)
Group A	-0.06 (0.02)	-0.02 (0.02)	0 (0.02)	0.04 (0.02)	0.02 (0.02)	-0.02 (0.02)
Group B	0 (0.03)	0.01 (0.03)	0.03 (0.03)	0.01 (0.03)	0.03 (0.03)	0.01 (0.03)
Group C	-0.07 (0.02)	-0.05 (0.02)	-0.05 (0.02)	0.02 (0.02)	-0.04 (0.02)	-0.01 (0.02)
Number of Parishes	723	706	509	456	462	334
Number of Schools	84	81	80	79	83	77
Number of Observations	40,164	40,101	37,501	40,283	39,124	36,714

**Model 3: Effects of displacement by student experience group – mathematics,
continued**

Between Parish Standard Deviation	0.09	0.06	0.09	0.06	0.07	0.06
Between School Standard Deviation	0.21	0.15	0.13	0.07	0.13	0.11
Within School Standard Deviation	0.60	0.64	0.59	0.58	0.57	0.60

Model 3: Effects of displacement by student experience group – English-language arts

Variable	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9
Intercept	5.84 (0.01)	7.92 (0.01)	7.19 (0.01)	7.02 (0.01)	7.72 (0.02)	6.92 (0.01)
Prior Reading (Linear)	80.81 (1.02)	NA	27.06 (0.90)	22.26 (0.88)	74.41 (1.01)	NA
Prior Reading (Quadratic)	-4.91 (0.73)	NA	-0.05 (0.65)	-0.79 (0.63)	-6.40 (0.71)	NA
Prior Reading (Cubic)	-6.65 (0.65)	NA	-1.07 (0.58)	-2.70 (0.56)	-5.89 (0.64)	NA
Prior Language (Linear)	52.62 (1.01)	75.49 (1.12)	118.01 (0.88)	134.72 (0.90)	60.20 (1.03)	63.24 (1.13)
Prior Language (Quadratic)	-9.33 (0.74)	3.37 (0.84)	6.52 (0.66)	2.17 (0.64)	-4.99 (0.72)	14.38 (0.79)
Prior Language (Cubic)	6.80 (0.65)	-9.40 (0.74)	-2.71 (0.59)	-4.09 (0.57)	17.63 (0.63)	-2.95 (0.67)
Prior Mathematics (Linear)	31.75 (1.01)	39.30 (1.05)	23.22 (0.90)	20.70 (0.89)	31.43 (1)	45.45 (1.03)
Prior Mathematics (Quadratic)	-5.93 (0.73)	3.60 (0.82)	2.16 (0.67)	0.15 (0.64)	-5.94 (0.71)	10.27 (0.76)
Prior Mathematics (Cubic)	2.89 (0.65)	-4.40 (0.74)	0.43 (0.59)	0.10 (0.58)	10.10 (0.63)	-5.49 (0.66)
Prior Science (Linear)	NA	10.84 (1.19)	NA	NA	NA	9.32 (1.21)
Prior Science (Quadratic)	NA	0.97 (0.82)	NA	NA	NA	1.99 (0.79)
Prior Science (Cubic)	NA	-2.13 (0.74)	NA	NA	NA	-1.76 (0.68)
Prior Social Studies (Linear)	NA	26.28 (1.24)	NA	NA	NA	41.04 (1.20)
Prior Social Studies (Quadratic)	NA	5.18 (0.84)	NA	NA	NA	15.85 (0.80)
Prior Social Studies (Cubic)	NA	-5.12 (0.74)	NA	NA	NA	-2.42 (0.69)
American Indian	-0.01 (0.04)	-0.02 (0.04)	0 (0.03)	-0.08 (0.03)	-0.08 (0.04)	-0.05 (0.04)
Asian	0.17 (0.03)	0.19 (0.03)	0.24 (0.03)	0.15 (0.02)	0.11 (0.03)	0.07 (0.03)
African American	-0.03 (0.01)	0.02 (0.01)	0.03 (0.01)	0.03 (0.01)	0.03 (0.01)	0.07 (0.01)
Hispanic	0.10 (0.02)	0.03 (0.03)	0.06 (0.02)	0.06 (0.02)	0.06 (0.02)	-0.02 (0.03)
Male	-0.14 (0.01)	-0.26 (0.01)	-0.16 (0.01)	-0.18 (0.01)	-0.15 (0.01)	-0.36 (0.01)
Entry School Performance	0.04 (0.01)	0.08 (0.01)	0.04 (0.01)	0.04 (0.01)	0.06 (0.01)	0.03 (0.01)
Group A	0.01 (0.02)	-0.05 (0.02)	-0.05 (0.02)	0.02 (0.02)	0.08 (0.02)	0 (0.02)
Group B	0.02 (0.03)	-0.04 (0.03)	-0.04 (0.03)	0.01 (0.02)	0.08 (0.03)	0 (0.03)
Group C	0 (0.02)	-0.11 (0.02)	-0.03 (0.02)	0 (0.02)	0.01 (0.02)	-0.02 (0.02)
Number of Parishes	723	706	509	456	458	336

Model 3: Effects of displacement by student experience group – English-language arts, continued

Number of Schools	84	81	80	79	83	77
Number of Observations	40,169	40,101	37,466	40,269	39,131	37,770
Between Parish Standard Deviation	0.07	0.06	0.05	0.05	0.09	0.07
Between School Standard Deviation	0.17	0.18	0.14	0.10	0.15	0.09
Within School Standard Deviation	0.60	0.66	0.54	0.51	0.59	0.61

Model 3: Effects of displacement by student experience group – reading

Variable	Grade 5	Grade 6	Grade 7	Grade 9
Intercept	9.17 (0.01)	8.47 (0.01)	8.15 (0.01)	8.06 (0.01)
Prior Reading (Linear)	NA	122.02 (0.91)	133.36 (0.91)	NA
Prior Reading (Quadratic)	NA	9.85 (0.65)	5.77 (0.65)	NA
Prior Reading (Cubic)	NA	-11.18 (0.58)	-10.48 (0.58)	NA
Prior Language (Linear)	58.57 (1.08)	12.10 (0.89)	18.64 (0.92)	53.99 (0.98)
Prior Language (Quadratic)	-0.28 (0.81)	4.10 (0.67)	-3.70 (0.66)	6.96 (0.68)
Prior Language (Cubic)	-7.55 (0.71)	3.36 (0.60)	2.42 (0.59)	-5.77 (0.58)
Prior Mathematics (Linear)	1.19 (1.01)	27.54 (0.91)	22.93 (0.92)	7.44 (0.89)
Prior Mathematics (Quadratic)	0.39 (0.79)	-2.39 (0.67)	-0.85 (0.66)	3.37 (0.66)
Prior Mathematics (Cubic)	0.43 (0.71)	1.01 (0.60)	-0.67 (0.59)	0.12 (0.57)
Prior Science (Linear)	34.04 (1.14)	NA	NA	35.57 (1.05)
Prior Science (Quadratic)	-0.49 (0.79)	NA	NA	6.28 (0.69)
Prior Science (Cubic)	-6.35 (0.71)	NA	NA	-4.73 (0.59)
Prior Social Studies (Linear)	58.24 (1.19)	NA	NA	69.52 (1.04)
Prior Social Studies (Quadratic)	11.73 (0.80)	NA	NA	24.31 (0.69)
Prior Social Studies (Cubic)	-12.82 (0.71)	NA	NA	-3.23 (0.60)
American Indian	-0.06 (0.04)	-0.09 (0.03)	-0.01 (0.03)	-0.08 (0.03)
Asian	-0.03 (0.03)	0.01 (0.03)	0.01 (0.03)	0 (0.02)
African American	-0.19 (0.01)	-0.14 (0.01)	-0.05 (0.01)	-0.07 (0.01)
Hispanic	-0.04 (0.03)	-0.07 (0.02)	0.03 (0.02)	0.01 (0.02)
Male	0.07 (0.01)	-0.03 (0.01)	-0.03 (0.01)	-0.10 (0.01)
Entry School Performance	0.05 (0.01)	0.03 (0.01)	0.03 (0.01)	0.05 (0.01)
Group A	-0.03 (0.02)	-0.04 (0.02)	0.03 (0.02)	0.03 (0.02)
Group B	-0.02 (0.03)	-0.04 (0.02)	0.03 (0.02)	0.02 (0.03)
Group C	-0.04 (0.02)	0 (0.02)	0 (0.02)	0.02 (0.02)
Number of Parishes	706	509	456	336
Number of Schools	81	80	79	77
Number of Observations	40,102	37,468	40,275	37,781
Between Parish Standard Deviation	0.07	0.03	0.04	0.08
Between School Standard Deviation	0.14	0.10	0.10	0.09
Within School Standard Deviation	0.63	0.54	0.53	0.53

Model 3: Effects of displacement by student experience group – science

Variable	Grade 4	Grade 8
Intercept	6.52 (0.01)	7.17 (0.01)
Prior Reading (Linear)	82.60 (1.05)	98.48 (1)
Prior Reading (Quadratic)	-0.27 (0.75)	5.73 (0.70)
Prior Reading (Cubic)	-6.40 (0.67)	-1.94 (0.64)
Prior Language (Linear)	14.56 (1.05)	17.05 (1.02)
Prior Language (Quadratic)	-1.47 (0.76)	-4.75 (0.71)
Prior Language (Cubic)	1.97 (0.67)	7.39 (0.63)
Prior Mathematics (Linear)	48.80 (1.04)	42.40 (0.99)
Prior Mathematics (Quadratic)	-8.52 (0.76)	-3.05 (0.70)
Prior Mathematics (Cubic)	1.54 (0.67)	6.56 (0.62)
American Indian	-0.04 (0.04)	-0.03 (0.04)
Asian	0.11 (0.03)	0 (0.03)
African American	-0.24 (0.01)	-0.16 (0.01)
Hispanic	-0.01 (0.02)	-0.01 (0.02)
Male	0.15 (0.01)	0.12 (0.01)
Entry School Performance	0.08 (0.01)	0.06 (0.01)
Group A	-0.04 (0.02)	0.05 (0.02)
Group B	0 (0.03)	0.05 (0.03)
Group C	-0.10 (0.02)	-0.06 (0.02)
Number of Parishes	723	457
Number of Schools	84	83
Number of Observations	40,137	39,067
Between Parish Standard Deviation	0.07	0.08
Between School Standard Deviation	0.15	0.12
Within School Standard Deviation	0.62	0.58

Model 3: Effects of displacement by student experience group – social studies

Variable	Grade 4	Grade 8
Intercept	7.46 (0.01)	6.61 (0.01)
Prior Reading (Linear)	76.63 (1.03)	102.66 (0.97)
Prior Reading (Quadratic)	-0.82 (0.73)	4.13 (0.68)
Prior Reading (Cubic)	-4.79 (0.66)	-4.89 (0.62)
Prior Language (Linear)	25.52 (1.03)	25.08 (0.99)
Prior Language (Quadratic)	-3.59 (0.75)	-6.63 (0.69)
Prior Language (Cubic)	2.85 (0.66)	8.32 (0.61)
Prior Mathematics (Linear)	49.17 (1.02)	39.58 (0.96)
Prior Mathematics (Quadratic)	-10.70 (0.74)	-4.57 (0.69)
Prior Mathematics (Cubic)	2 (0.66)	5.08 (0.61)
American Indian	0.01 (0.04)	0.03 (0.04)
Asian	0.08 (0.03)	0.14 (0.03)
African American	-0.16 (0.01)	-0.06 (0.01)
Hispanic	0.04 (0.02)	0.12 (0.02)
Male	0.08 (0.01)	0.11 (0.01)
Entry School Performance	0.10 (0.01)	0.06 (0.01)
Group A	0.02 (0.02)	0.07 (0.02)
Group B	0.04 (0.03)	0.07 (0.03)
Group C	-0.06 (0.02)	-0.01 (0.02)
Number of Parishes	723	457
Number of Schools	84	83
Number of Observations	40,130	39,045
Between Parish Standard Deviation	0.07	0.07
Between School Standard Deviation	0.18	0.15
Within School Standard Deviation	0.61	0.57

Model 4: The effect of relocating to schools with higher or lower school performance than students' original schools – mathematics

Variable	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9
Intercept	6.04 (0.02)	8.38 (0.01)	8.28 (0.02)	8.43 (0.01)	8.56 (0.01)	8.45 (0.01)
Prior Reading (Linear)	22.29 (1.02)	NA	9.12 (0.99)	21.19 (1)	17.88 (0.98)	NA
Prior Reading (Quadratic)	4.51 (0.73)	NA	1.59 (0.71)	0.85 (0.70)	-2.28 (0.69)	NA
Prior Reading (Cubic)	-1.80 (0.66)	NA	0.32 (0.63)	-0.24 (0.64)	0.21 (0.63)	NA
Prior Language (Linear)	37.71 (1.02)	16.94 (1.09)	23.73 (0.96)	17.43 (1.01)	26.14 (1)	8.89 (1.10)
Prior Language (Quadratic)	1.95 (0.74)	7.32 (0.82)	1.35 (0.73)	0.45 (0.72)	0.38 (0.69)	0.99 (0.78)
Prior Language (Cubic)	1.91 (0.66)	-0.53 (0.71)	2.06 (0.65)	4.08 (0.65)	7.82 (0.61)	-1.35 (0.66)
Prior Mathematics (Linear)	88.42 (1.02)	85.43 (1.02)	112.42 (0.98)	116.68 (1)	108.62 (0.97)	95.97 (0.99)
Prior Mathematics (Quadratic)	-1.14 (0.74)	5.84 (0.80)	-1.01 (0.73)	-0.96 (0.72)	2.68 (0.69)	17.52 (0.75)
Prior Mathematics (Cubic)	-1.28 (0.65)	-14.16 (0.72)	-5.52 (0.65)	-4.73 (0.65)	9.52 (0.61)	-12.50 (0.65)
Prior Science (Linear)	NA	14.05 (1.15)	NA	NA	NA	13.69 (1.17)
Prior Science (Quadratic)	NA	1.83 (0.79)	NA	NA	NA	0.46 (0.77)
Prior Science (Cubic)	NA	-1.62 (0.71)	NA	NA	NA	-2.63 (0.67)
Prior Social Studies (Linear)	NA	27.20 (1.21)	NA	NA	NA	21.47 (1.17)
Prior Social Studies (Quadratic)	NA	7.86 (0.81)	NA	NA	NA	7.01 (0.78)
Prior Social Studies (Cubic)	NA	-3.61 (0.72)	NA	NA	NA	-1.72 (0.67)
American Indian	-0.06 (0.04)	-0.09 (0.04)	-0.05 (0.04)	-0.06 (0.04)	-0.01 (0.04)	-0.08 (0.04)
Asian	0.27 (0.03)	0.08 (0.04)	0.21 (0.03)	0.15 (0.03)	0.18 (0.03)	0.10 (0.03)
African American	-0.14 (0.01)	-0.14 (0.01)	-0.10 (0.01)	-0.10 (0.01)	-0.12 (0.01)	-0.15 (0.01)
Hispanic	0.04 (0.03)	0.01 (0.03)	0.06 (0.03)	0.02 (0.03)	0.02 (0.03)	0.01 (0.03)
Male	0.05 (0.01)	0.14 (0.01)	0.09 (0.01)	0.11 (0.01)	0.14 (0.01)	-0.03 (0.01)
Entry School Performance	0.07 (0.01)	0.05 (0.01)	0.06 (0.01)	0.05 (0.01)	0.06 (0.01)	0.05 (0.01)
Enrolled in Lower Performing School	-0.18 (0.03)	-0.09 (0.03)	-0.12 (0.03)	0.02 (0.03)	-0.04 (0.03)	-0.05 (0.03)
Enrolled in Higher Performing School	0.02 (0.02)	-0.02 (0.02)	0.01 (0.02)	0.04 (0.02)	-0.05 (0.02)	0.02 (0.03)
Number of Parishes	703	685	492	435	444	318
Number of Schools	79	77	76	78	80	75
Number of Observations	35,352	35,290	32,948	35,673	34,518	32,348
Between Parish Standard Deviation	0.08	0.06	0.09	0.05	0.06	0.06
Between School Standard Deviation	0.20	0.15	0.13	0.07	0.14	0.11
Within School Standard Deviation	0.60	0.64	0.59	0.58	0.57	0.60

Model 4: The effect of relocating to schools with higher or lower school performance than students' original schools – English-language arts

Variable	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9
Intercept	5.84 (0.01)	7.92 (0.01)	7.19 (0.01)	7.02 (0.01)	7.72 (0.02)	6.92 (0.01)
Prior Reading (Linear)	76.36 (1.02)	NA	25.44 (0.91)	21.60 (0.89)	70.18 (1.01)	NA
Prior Reading (Quadratic)	-4.78 (0.73)	NA	-0.28 (0.65)	-0.53 (0.63)	-5.78 (0.71)	NA
Prior Reading (Cubic)	-6.95 (0.65)	NA	-0.94 (0.58)	-2.80 (0.57)	-6.20 (0.64)	NA
Prior Language (Linear)	49.16 (1.02)	71 (1.12)	110.44 (0.88)	126.33 (0.90)	56.25 (1.03)	60.05 (1.13)
Prior Language (Quadratic)	-8.71 (0.74)	3.37 (0.84)	5.94 (0.66)	1.81 (0.64)	-4.86 (0.71)	13.86 (0.79)
Prior Language (Cubic)	5.88 (0.65)	-8.79 (0.74)	-2.73 (0.59)	-3.86 (0.57)	16.46 (0.63)	-2.85 (0.67)
Prior Mathematics (Linear)	29.14 (1.01)	36.44 (1.05)	21.96 (0.90)	19.12 (0.89)	29.29 (1)	42.84 (1.03)
Prior Mathematics (Quadratic)	-5.49 (0.74)	3.65 (0.82)	2.26 (0.66)	0.09 (0.64)	-5.85 (0.71)	9.04 (0.76)
Prior Mathematics (Cubic)	3.38 (0.65)	-4.26 (0.74)	0.65 (0.59)	0.20 (0.58)	9.71 (0.63)	-5.32 (0.66)
Prior Science (Linear)	NA	10.65 (1.19)	NA	NA	NA	9.51 (1.21)
Prior Science (Quadratic)	NA	0.97 (0.82)	NA	NA	NA	2.10 (0.79)
Prior Science (Cubic)	NA	-2.02 (0.74)	NA	NA	NA	-2 (0.68)
Prior Social Studies (Linear)	NA	24.68 (1.24)	NA	NA	NA	37.42 (1.20)
Prior Social Studies (Quadratic)	NA	4.37 (0.84)	NA	NA	NA	14.64 (0.79)
Prior Social Studies (Cubic)	NA	-4.83 (0.74)	NA	NA	NA	-2.21 (0.68)
American Indian	-0.02 (0.04)	-0.04 (0.05)	0.01 (0.04)	-0.07 (0.03)	-0.09 (0.04)	-0.07 (0.04)
Asian	0.18 (0.03)	0.18 (0.04)	0.25 (0.03)	0.15 (0.03)	0.11 (0.03)	0.06 (0.03)
African American	-0.03 (0.01)	0.02 (0.01)	0.03 (0.01)	0.03 (0.01)	0.02 (0.01)	0.08 (0.01)
Hispanic	0.10 (0.03)	0.01 (0.03)	0.04 (0.03)	0.08 (0.02)	0.05 (0.03)	-0.04 (0.03)
Male	-0.14 (0.01)	-0.27 (0.01)	-0.16 (0.01)	-0.18 (0.01)	-0.15 (0.01)	-0.36 (0.01)
Entry School Performance	0.06 (0.01)	0.08 (0.01)	0.05 (0.01)	0.04 (0.01)	0.08 (0.01)	0.03 (0.01)
Enrolled in Lower Performing School	-0.12 (0.03)	-0.13 (0.03)	-0.08 (0.02)	-0.01 (0.02)	-0.04 (0.03)	-0.05 (0.03)
Enrolled in Higher Performing School	0.08 (0.02)	-0.08 (0.02)	0.03 (0.02)	0.02 (0.02)	0.05 (0.02)	0 (0.02)
Number of Parishes	703	684	492	435	440	318
Number of Schools	79	77	76	78	80	75
Number of Observations	35,355	35,290	32,918	35,664	34,524	33,341
Between Parish Standard Deviation	0.08	0.06	0.05	0.05	0.08	0.07
Between School Standard Deviation	0.17	0.18	0.14	0.11	0.16	0.10
Within School Standard Deviation	0.60	0.66	0.54	0.51	0.59	0.61

Model 4: The effect of relocating to schools with higher or lower school performance than students' original schools – reading

Variable	Grade 5	Grade 6	Grade 7	Grade 9
Intercept	9.17 (0.01)	8.47 (0.01)	8.15 (0.01)	8.06 (0.01)
Prior Reading (Linear)	NA	114.88 (0.92)	125.72 (0.92)	NA
Prior Reading (Quadratic)	NA	8.80 (0.65)	5.28 (0.65)	NA
Prior Reading (Cubic)	NA	-10.57 (0.58)	-10.50 (0.59)	NA
Prior Language (Linear)	54.68 (1.08)	11.37 (0.89)	17.47 (0.93)	51.16 (0.98)
Prior Language (Quadratic)	0.17 (0.81)	4.02 (0.67)	-3.59 (0.66)	6.23 (0.68)
Prior Language (Cubic)	-7.42 (0.71)	3.34 (0.60)	2.37 (0.60)	-5.31 (0.58)
Prior Mathematics (Linear)	0.98 (1.01)	25.44 (0.91)	21.40 (0.92)	6.83 (0.89)
Prior Mathematics (Quadratic)	0.58 (0.79)	-2.31 (0.67)	-0.51 (0.66)	2.77 (0.65)
Prior Mathematics (Cubic)	0.82 (0.71)	1 (0.60)	-0.52 (0.60)	-0.01 (0.57)
Prior Science (Linear)	31.74 (1.14)	NA	NA	33.51 (1.05)
Prior Science (Quadratic)	-0.49 (0.79)	NA	NA	6.05 (0.68)
Prior Science (Cubic)	-5.60 (0.71)	NA	NA	-5.05 (0.59)
Prior Social Studies (Linear)	55.15 (1.19)	NA	NA	65.19 (1.04)
Prior Social Studies (Quadratic)	10.89 (0.80)	NA	NA	22.99 (0.69)
Prior Social Studies (Cubic)	-12.15 (0.71)	NA	NA	-2.74 (0.59)
American Indian	-0.07 (0.04)	-0.07 (0.04)	-0.01 (0.03)	-0.09 (0.03)
Asian	-0.02 (0.04)	-0.01 (0.03)	0.01 (0.03)	0 (0.03)
African American	-0.19 (0.01)	-0.14 (0.01)	-0.06 (0.01)	-0.07 (0.01)
Hispanic	-0.04 (0.03)	-0.07 (0.03)	0.04 (0.02)	0 (0.03)
Male	0.08 (0.01)	-0.03 (0.01)	-0.03 (0.01)	-0.11 (0.01)
Entry School Performance	0.06 (0.01)	0.04 (0.01)	0.03 (0.01)	0.05 (0.01)
Enrolled in Lower Performing School	-0.07 (0.03)	-0.06 (0.02)	0 (0.02)	0.04 (0.03)
Enrolled in Higher Performing School	-0.02 (0.02)	0.06 (0.02)	0 (0.02)	0.03 (0.02)
Number of Parishes	684	492	435	318
Number of Schools	77	76	78	75
Number of Observations	35,291	32,921	35,669	33,352
Between Parish Standard Deviation	0.07	0.02	0.04	0.09
Between School Standard Deviation	0.14	0.11	0.10	0.08
Within School Standard Deviation	0.63	0.54	0.53	0.53

Model 4: The effect of relocating to schools with higher or lower school performance than students' original schools – science

Variable	Grade 4	Grade 8
Intercept	6.52 (0.01)	7.17 (0.01)
Prior Reading (Linear)	78.35 (1.05)	92.14 (1)
Prior Reading (Quadratic)	-0.20 (0.75)	5.70 (0.70)
Prior Reading (Cubic)	-6.38 (0.68)	-2.31 (0.64)
Prior Language (Linear)	13.80 (1.05)	16.16 (1.02)
Prior Language (Quadratic)	-1.60 (0.77)	-4.78 (0.71)
Prior Language (Cubic)	1.80 (0.68)	6.84 (0.63)
Prior Mathematics (Linear)	45.34 (1.05)	40.24 (0.99)
Prior Mathematics (Quadratic)	-7.84 (0.76)	-2.62 (0.70)
Prior Mathematics (Cubic)	1.25 (0.67)	6.23 (0.62)
American Indian	-0.05 (0.04)	-0.03 (0.04)
Asian	0.10 (0.03)	0 (0.03)
African American	-0.25 (0.01)	-0.16 (0.01)
Hispanic	-0.01 (0.03)	0.02 (0.03)
Male	0.15 (0.01)	0.12 (0.01)
Entry School Performance	0.08 (0.01)	0.07 (0.01)
Enrolled in Lower Performing School	-0.18 (0.03)	-0.09 (0.03)
Enrolled in Higher Performing School	-0.04 (0.02)	-0.02 (0.02)
Number of Parishes	703	439
Number of Schools	79	80
Number of Observations	35,326	34,467
Between Parish Standard Deviation	0.07	0.07
Between School Standard Deviation	0.15	0.12
Within School Standard Deviation	0.62	0.58

Model 4: The effect of relocating to schools with higher or lower school performance than students' original schools – social studies

Variable	Grade 4	Grade 8
Intercept	7.45 (0.01)	6.61 (0.01)
Prior Reading (Linear)	72.57 (1.03)	95.97 (0.98)
Prior Reading (Quadratic)	-1.06 (0.73)	4.13 (0.68)
Prior Reading (Cubic)	-4.85 (0.66)	-5.27 (0.62)
Prior Language (Linear)	23.98 (1.03)	23.96 (0.99)
Prior Language (Quadratic)	-3.51 (0.75)	-6.53 (0.69)
Prior Language (Cubic)	2.62 (0.66)	7.75 (0.61)
Prior Mathematics (Linear)	45.78 (1.02)	37.18 (0.97)
Prior Mathematics (Quadratic)	-9.92 (0.74)	-4.33 (0.69)
Prior Mathematics (Cubic)	1.76 (0.66)	4.92 (0.61)
American Indian	0.01 (0.04)	0.02 (0.04)
Asian	0.07 (0.03)	0.17 (0.03)
African American	-0.16 (0.01)	-0.06 (0.01)
Hispanic	0.03 (0.03)	0.12 (0.03)
Male	0.08 (0.01)	0.11 (0.01)
Entry School Performance	0.12 (0.01)	0.06 (0.01)
Enrolled in Lower Performing School	-0.16 (0.03)	-0.01 (0.03)
Enrolled in Higher Performing School	0.03 (0.02)	0 (0.02)
Number of Parishes	703	439
Number of Schools	79	80
Number of Observations	35,321	34,448
Between Parish Standard Deviation	0.07	0.06
Between School Standard Deviation	0.18	0.15
Within School Standard Deviation	0.61	0.57

Model 5: Effects of time out of school and high mobility among schools – mathematics

Variable	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9
Intercept	5.96 (0.09)	8.04 (0.08)	7.97 (0.08)	8.31 (0.08)	8.34 (0.09)	8.25 (0.09)
Prior Reading (Linear)	2.98 (1.16)	NA	1.31 (0.95)	3.41 (0.95)	4.82 (1.10)	NA
Prior Reading (Quadratic)	1.31 (0.88)	NA	-0.66 (0.71)	0.31 (0.75)	-2.36 (0.75)	NA
Prior Reading (Cubic)	-0.03 (0.75)	NA	-0.50 (0.63)	0.41 (0.65)	1.90 (0.69)	NA
Prior Language (Linear)	9.45 (1.16)	3.76 (1.12)	3.45 (0.99)	4.90 (0.97)	5.80 (1.16)	0.93 (1.20)
Prior Language (Quadratic)	1.35 (0.85)	0.44 (0.85)	0.56 (0.74)	-0.33 (0.76)	-1.65 (0.78)	-0.11 (0.85)
Prior Language (Cubic)	-0.16 (0.74)	0.35 (0.74)	0.53 (0.67)	-0.26 (0.68)	0.32 (0.69)	-0.52 (0.75)
Prior Mathematics (Linear)	18.76 (1.16)	17.94 (1.09)	25.52 (0.99)	22.22 (0.97)	21.74 (1.09)	17.99 (1.08)
Prior Mathematics (Quadratic)	0.91 (0.85)	4.44 (0.83)	0.95 (0.73)	-1.97 (0.74)	1.37 (0.77)	4.65 (0.93)
Prior Mathematics (Cubic)	-0.22 (0.75)	-2.34 (0.71)	-1.26 (0.65)	-0.92 (0.66)	0.03 (0.69)	-2.19 (0.83)
Prior Science (Linear)	NA	0.47 (1.21)	NA	NA	NA	2.22 (1.26)
Prior Science (Quadratic)	NA	0.19 (0.86)	NA	NA	NA	-0.29 (0.95)
Prior Science (Cubic)	NA	0.15 (0.77)	NA	NA	NA	-1.60 (0.84)
Prior Social Studies (Linear)	NA	4.59 (1.21)	NA	NA	NA	5.21 (1.21)
Prior Social Studies (Quadratic)	NA	3.09 (0.88)	NA	NA	NA	1.48 (0.85)
Prior Social Studies (Cubic)	NA	0.13 (0.75)	NA	NA	NA	0.80 (0.74)
American Indian	-0.24 (0.25)	-0.75 (0.26)	-0.01 (0.23)	0.09 (0.21)	-0.07 (0.38)	0.60 (0.33)
Asian	0.28 (0.13)	0 (0.13)	0.40 (0.11)	0.35 (0.12)	0.16 (0.13)	0.12 (0.12)
African American	-0.15 (0.05)	-0.10 (0.05)	-0.08 (0.04)	-0 (0.04)	-0.09 (0.05)	-0.07 (0.05)
Hispanic	0.06 (0.13)	0.02 (0.11)	0.03 (0.10)	-0.08 (0.10)	-0.12 (0.14)	0.04 (0.14)
Male	0.03 (0.04)	0.17 (0.03)	0.06 (0.03)	0.13 (0.03)	0.17 (0.04)	-0.02 (0.04)
Entry School Performance	-0.02 (0.03)	0.05 (0.02)	0.01 (0.02)	0.06 (0.02)	0.05 (0.02)	0.06 (0.02)
Tested School Performance	0.11 (0.02)	0.11 (0.02)	0.07 (0.02)	0.03 (0.02)	0.03 (0.03)	0 (0.03)
Number of Schools Attended	-0.07 (0.03)	0.01 (0.02)	-0.02 (0.02)	-0.05 (0.02)	-0.06 (0.03)	-0.06 (0.03)
Months Until Re-enrolled	-0.06 (0.02)	0 (0.02)	-0.03 (0.02)	-0.02 (0.02)	0 (0.02)	-0.02 (0.02)
Number of Parishes	432	426	301	251	255	196
Number of Schools	64	66	61	66	67	64
Number of Observations	1,505	1,731	1,637	1,518	1,295	1,368
Between Parish Standard Deviation	0.14	0.09	0.08	0.08	0.08	0.05
Between School Standard Deviation	0.15	0.07	0.10	0.03	0.12	0.03
Within School Standard Deviation	0.67	0.68	0.59	0.58	0.64	0.66

Model 5: Effects of time out of school and high mobility among schools – English-language arts

Variable	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9
Intercept	5.81 (0.10)	7.70 (0.08)	6.95 (0.07)	6.91 (0.07)	7.70 (0.09)	6.63 (0.08)
Prior Reading (Linear)	14.69 (1.27)	NA	3.47 (0.86)	3.15 (0.87)	13.89 (1.12)	NA
Prior Reading (Quadratic)	-0.76 (0.96)	NA	-2.06 (0.64)	0.50 (0.68)	-2.50 (0.77)	NA
Prior Reading (Cubic)	-1.02 (0.82)	NA	-1.20 (0.58)	-0.20 (0.60)	-1.15 (0.70)	NA
Prior Language (Linear)	12.52 (1.26)	12.53 (1.14)	21.93 (0.90)	24.22 (0.88)	11.40 (1.18)	10.06 (1.10)
Prior Language (Quadratic)	-1.50 (0.92)	0.58 (0.86)	2.53 (0.67)	0.62 (0.69)	-2.98 (0.79)	3.37 (0.78)
Prior Language (Cubic)	1.31 (0.80)	-1.78 (0.76)	0.73 (0.61)	-1.17 (0.62)	4.51 (0.70)	0.92 (0.69)
Prior Mathematics (Linear)	6.43 (1.27)	7.97 (1.11)	5.99 (0.90)	5.38 (0.89)	7.98 (1.10)	7.67 (1)
Prior Mathematics (Quadratic)	-1.25 (0.92)	1.92 (0.84)	0.62 (0.67)	-0.69 (0.67)	-1.02 (0.79)	1.57 (0.85)
Prior Mathematics (Cubic)	1.44 (0.81)	-0.39 (0.73)	0.31 (0.60)	0.06 (0.60)	0.56 (0.70)	-2.20 (0.76)
Prior Science (Linear)	NA	1.20 (1.23)	NA	NA	NA	2.16 (1.17)
Prior Science (Quadratic)	NA	0.42 (0.88)	NA	NA	NA	0.68 (0.86)
Prior Science (Cubic)	NA	0.31 (0.78)	NA	NA	NA	0.47 (0.77)
Prior Social Studies (Linear)	NA	4.86 (1.23)	NA	NA	NA	6.78 (1.11)
Prior Social Studies (Quadratic)	NA	2.65 (0.90)	NA	NA	NA	4 (0.78)
Prior Social Studies (Cubic)	NA	-0.12 (0.77)	NA	NA	NA	0.69 (0.67)
American Indian	-0.09 (0.27)	-0.36 (0.27)	0.04 (0.21)	0.13 (0.19)	-0.85 (0.39)	0.41 (0.30)
Asian	0.15 (0.14)	0.30 (0.14)	0.26 (0.10)	0.24 (0.11)	0.13 (0.13)	0.14 (0.11)
African American	-0.01 (0.05)	0.02 (0.05)	0 (0.04)	0.02 (0.04)	0.12 (0.05)	0.24 (0.04)
Hispanic	0.21 (0.14)	0.19 (0.11)	-0.05 (0.09)	0.06 (0.10)	0.13 (0.14)	0.27 (0.12)
Male	-0.16 (0.04)	-0.25 (0.03)	-0.12 (0.03)	-0.15 (0.03)	-0.12 (0.04)	-0.31 (0.03)
Entry School Performance	-0.03 (0.03)	0.07 (0.02)	-0.01 (0.02)	0.03 (0.02)	0.03 (0.02)	0.04 (0.02)
Tested School Performance	0.11 (0.02)	0.14 (0.02)	0.06 (0.02)	0.03 (0.02)	0.01 (0.03)	0.08 (0.03)
Number of Schools Attended	-0.09 (0.03)	-0.03 (0.03)	-0.05 (0.02)	-0.04 (0.02)	-0.10 (0.03)	-0.08 (0.02)
Months Until Re-enrolled	-0.06 (0.02)	-0.05 (0.02)	-0.03 (0.01)	-0.03 (0.01)	-0.08 (0.02)	-0.01 (0.02)
Number of Parishes	432	426	301	252	255	197
Number of Schools	64	66	61	66	67	65
Number of Observations	1,505	1,731	1,636	1,517	1,295	1,405
Between Parish Standard Deviation	0.04	0.08	0.04	0	0	0.08
Between School Standard Deviation	0.03	0	0.11	0.05	0.13	0.05
Within School Standard Deviation	0.74	0.70	0.54	0.53	0.65	0.60

Model 5: Effects of time out of school and high mobility among schools – reading

Variable	Grade 5	Grade 6	Grade 7	Grade 9
Intercept	8.97 (0.09)	8.29 (0.08)	7.87 (0.07)	7.85 (0.08)
Prior Reading (Linear)	NA	21.40 (0.93)	22.03 (0.92)	NA
Prior Reading (Quadratic)	NA	1 (0.69)	0.69 (0.72)	NA
Prior Reading (Cubic)	NA	-3.62 (0.62)	-2.61 (0.63)	NA
Prior Language (Linear)	10.92 (1.15)	0.99 (0.96)	3.11 (0.94)	10.34 (1.02)
Prior Language (Quadratic)	0.94 (0.87)	0.96 (0.72)	-0.69 (0.73)	2.32 (0.72)
Prior Language (Cubic)	-0.76 (0.76)	1.15 (0.65)	0.71 (0.66)	-1.21 (0.64)
Prior Mathematics (Linear)	0.52 (1.12)	6.78 (0.97)	5.54 (0.94)	0.80 (0.93)
Prior Mathematics (Quadratic)	0.15 (0.85)	-0.02 (0.72)	-0.62 (0.71)	0.16 (0.79)
Prior Mathematics (Cubic)	0.51 (0.73)	0.73 (0.64)	0.64 (0.64)	-0.93 (0.71)
Prior Science (Linear)	5.36 (1.24)	NA	NA	8.19 (1.09)
Prior Science (Quadratic)	1.48 (0.89)	NA	NA	1.57 (0.81)
Prior Science (Cubic)	-1.15 (0.79)	NA	NA	-0.44 (0.72)
Prior Social Studies (Linear)	8.72 (1.24)	NA	NA	9.08 (1.03)
Prior Social Studies (Quadratic)	3.43 (0.90)	NA	NA	4.66 (0.73)
Prior Social Studies (Cubic)	-1.26 (0.77)	NA	NA	1.59 (0.63)
American Indian	-0.57 (0.27)	-0.10 (0.23)	0.01 (0.20)	-0.02 (0.28)
Asian	0.22 (0.14)	0.03 (0.10)	-0.08 (0.11)	0.17 (0.10)
African American	-0.21 (0.05)	-0.10 (0.04)	-0.06 (0.04)	0.08 (0.04)
Hispanic	-0.02 (0.11)	-0.33 (0.10)	0.05 (0.10)	0.07 (0.12)
Male	0.07 (0.04)	-0.05 (0.03)	-0.02 (0.03)	-0.06 (0.03)
Entry School Performance	0.05 (0.02)	0.01 (0.02)	0.03 (0.02)	0.07 (0.02)
Tested School Performance	0.09 (0.02)	0.05 (0.02)	0.03 (0.02)	0.05 (0.03)
Number of Schools Attended	-0.02 (0.03)	-0.04 (0.02)	0.02 (0.02)	-0.09 (0.02)
Months Until Re-enrolled	-0.03 (0.02)	-0.03 (0.02)	0 (0.01)	-0.01 (0.02)
Number of Parishes	426	301	252	197
Number of Schools	66	61	66	65
Number of Observations	1,731	1,636	1,518	1,406
Between Parish Standard Deviation	0.08	0.07	0.02	0.06
Between School Standard Deviation	0.09	0.05	0.07	0.08
Within School Standard Deviation	0.70	0.58	0.56	0.56

Model 5: Effects of time out of school and high mobility among schools – science

Variable	Grade 4	Grade 8
Intercept	6.36 (0.10)	6.99 (0.09)
Prior Reading (Linear)	15.52 (1.24)	18.17 (1.07)
Prior Reading (Quadratic)	1.09 (0.94)	0.32 (0.74)
Prior Reading (Cubic)	-1.65 (0.80)	0.90 (0.67)
Prior Language (Linear)	2.35 (1.23)	4.65 (1.13)
Prior Language (Quadratic)	-0.05 (0.90)	-2.02 (0.76)
Prior Language (Cubic)	0.51 (0.78)	1.21 (0.67)
Prior Mathematics (Linear)	10.03 (1.24)	8.11 (1.06)
Prior Mathematics (Quadratic)	-2.67 (0.90)	-0.91 (0.76)
Prior Mathematics (Cubic)	0.15 (0.79)	-0.32 (0.67)
American Indian	-0.18 (0.26)	-0.68 (0.37)
Asian	0 (0.14)	-0.07 (0.12)
African American	-0.21 (0.05)	-0.20 (0.05)
Hispanic	0.13 (0.14)	-0.08 (0.13)
Male	0.09 (0.04)	0.11 (0.04)
Entry School Performance	0.04 (0.03)	0.01 (0.02)
Tested School Performance	0.11 (0.03)	0.06 (0.02)
Number of Schools Attended	-0.05 (0.03)	-0.03 (0.03)
Months Until Re-enrolled	-0.03 (0.02)	-0.04 (0.02)
Number of Parishes	432	254
Number of Schools	64	67
Number of Observations	1,502	1,290
Between Parish Standard Deviation	0.16	0.10
Between School Standard Deviation	0.14	0
Within School Standard Deviation	0.71	0.63

Model 5: Effects of time out of school and high mobility among schools – social studies

Variable	Grade 4	Grade 8
Intercept	7.29 (0.10)	6.50 (0.09)
Prior Reading (Linear)	12.89 (1.25)	18.44 (1.08)
Prior Reading (Quadratic)	0.47 (0.94)	0.47 (0.74)
Prior Reading (Cubic)	-1.11 (0.80)	0.42 (0.67)
Prior Language (Linear)	6.02 (1.24)	6.42 (1.14)
Prior Language (Quadratic)	-1.39 (0.91)	-3.71 (0.76)
Prior Language (Cubic)	1.73 (0.79)	1.50 (0.67)
Prior Mathematics (Linear)	11.41 (1.25)	8.12 (1.07)
Prior Mathematics (Quadratic)	-2.60 (0.91)	-0.28 (0.76)
Prior Mathematics (Cubic)	1.34 (0.80)	0.14 (0.68)
American Indian	0.23 (0.27)	-0.68 (0.37)
Asian	-0.08 (0.14)	0.16 (0.12)
African American	-0.14 (0.05)	0 (0.05)
Hispanic	0.11 (0.14)	0.01 (0.13)
Male	0.04 (0.04)	0.06 (0.04)
Entry School Performance	0.03 (0.03)	0.04 (0.02)
Tested School Performance	0.12 (0.02)	0.03 (0.02)
Number of Schools Attended	-0.04 (0.03)	-0.06 (0.03)
Months Until Re-enrolled	-0.05 (0.02)	-0.06 (0.02)
Number of Parishes	432	254
Number of Schools	64	67
Number of Observations	1,502	1,284
Between Parish Standard Deviation	0.12	0
Between School Standard Deviation	0.12	0.11
Within School Standard Deviation	0.72	0.63